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Masaoka et al.

(54) MICRONEEDLE

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(57) ABSTRACT

A microneedle and a microneedle array, which have both aspects of safety and easiness to use and can administer a predetermined dose of a medical agent without causing a pain by smoothly running into the skin surface layer of a patient, includes a frustum and a forward end portion thereon, the forward end portion having a forward end apex angle in the range of 15 to 60° and a forward end diameter in the range of 1 to 20 μm and satisfying the expression H/D≥5, where H is a total height of the microneedle, and D is a diameter of a bottom surface of the frustum).

17 Claims, 9 Drawing Sheets

